

Optimists predicted seven years ago that Lake Apopka, long known as the state's most polluted large lake, would be ready for swimmers by 2007 (The Orlando Sentinel).

In your opinion, why has this not happened, and is it possible to restore the lake within the next decade?

"Wetland restoration and management around the lake is the top priority to restoring the lake. A large percentage of the lakes pollution was caused by the vegetable farming on the northern shore. These highly productive "muck farms" were created in the 1940s. A levy was built that reduced the size of the lake by 21,000 acres.

(...)

That's a long time. He told me that the lake is pretty shallow at only five feet deep at the moment, compared to what it used to be at ten feet, so it might not take that long. But then again the lake is about 31,000 acres. Anything is possible though, anything is possible.

I thought to ask him how much this was all costing, but thought that it might not be too appropriate. So I looked it up and...the restoration process for Lake Apopka is taking up to 110 million dollars. "

Samantha DiCaro, South Lake High School, 10th grade

"The public plays an enormous role in the clean-up. The more careless attitude toward pollution, the longer before the lake will once again be open to swimmers. The public think throwing one or two pieces of trash out of the window of their car does not hurt the environment. That assumption is wrong. If every person throws even one small piece of trash on the ground, the pollution would rapidly build up. Not only is improper disposal of debris and waste not good for the environment, but it is also punishable by law with a hefty fine. It is not just the accumulation of solids harming the environment; liquids cause even more damage. It is important that oils, household cleaning supplies, gasoline, and ammonia are properly disposed of at a landfill or certified disposal location (FOLA.org)."

Kristin Lloyd, Tavares High School, 10th grade

Will planting more trees be the solution to mitigating rising atmospheric carbon dioxide levels?

"On the Global Scale, by the rules of Kyoto Protocol, many countries do plant forests to reduce their carbon footprint. However, to reduce the United State's carbon footprint by even 7% would require a forest the size of Texas.

While nothing is as effective as actually reducing carbon output and using smart, renewable energy, planting trees can at least reduce the severity as carbon output both on a global and personal scale.

And so, while planting trees is not a solution to the global warming problem per se, it is certainly a useful tool if used carefully and correctly. While not changing the way we put carbon into our atmosphere, it helps take the edge off, because at this time, non-eco friendly travel is unavoidable. So, go ahead, buy a tree. Just make sure you know what you're buying."

Ryan Milejcak, South Lake High School

Is organic farming superior to modern conventional farming?

“Take a bite into your favorite fruit, whether it is a strawberry or grape. Taste the sweet, natural flavors take over your taste buds, but is this flavor all natural or is it genetically altered? Was this delicious fruit harvested among pesticide contaminated produce or has it been produced naturally? How has this fruit been farmed, organically or conventionally? This question could be the only question lying between you and that strawberry contaminated with pesticides or the scrumptious taste of a naturally produced strawberry.

(...)

The “rotation effect” also amplifies crop harvests. Crops can replace nutrients that were taken away from the previous year’s crops. A simple two year rotation also helps with pests, so that the next year the pests won’t have a sustainable habitat. Most ‘organic growers’ use more complex ‘four-to-eight year rotations’ designed to maximize harvests by careful planting to maximize the twenty essential nutrients needed in the soil. The more complex and organized organic systems can almost remove pests completely. Pests include insects, weeds, and disease (Sooby).”

Mary Cecil, South Lake High School, 12th grade



“On the other hand, conventional farming is a type of farming that uses chemical fertilizers and pesticides to increase the yield from crops, thereby increasing the amount of income that can be made from the selling of crops (ucdavis). Chemical fertilizers can be very harmful because of the different materials used in them. For example, some conventional farmers use sewage treatment plant sludge to fertilize their crops (fabric of nature). This can be highly dangerous to be used in crops because many chemicals are dumped into sewage systems along with human wastes. These different chemicals being put in the sewage, which fertilizes many crops, can be mutagenic, meaning that they can cause genetic mutations (fabric of nature). In addition, another chemical fertilizer that is commonly used is nitrogen (fabric of nature). A multitude of farmers dump a lot of nitrogen on their fields to try and help crops to grow better (fabric of nature). When it rains and run-off occurs in the fields, much of the nitrogen is washed into rivers (fabric of nature). The run-off nitrogen causes the soil that it has come to rest in to be oxygen-deprived, causing the ecosystem around it to lose many plants that need oxygen to thrive (fabric of nature). Therefore, this threatens many animals' habitats throwing of the ecosystem. In addition, pesticides are used to kill organisms that are harmful to crops. The problem with pesticides is that since they are used to kill organisms they don't just affect the organisms they kill (fabric of nature). This results in humans taking in these harmful chemicals that can be damaging to the body. In addition, a new type of conventional farming is beginning to be used. The method is where the farmer modifies the genetics of a crop to increase production. This can be dangerous because since the farmer is changing the genetic make-up of the food it can create unwanted side effects rather than just the benefits of enhanced production (earthportals).”

Jonathan Johnson, Tavares High School, 10th grade

What are the behavioral and environmental benefits to having large areas of "green space"?

"Imagine concrete walls engulfing your world, huge buildings blocking out the sun that you once carelessly soaked in, or never feeling the soft cushion of the cool, damp grass for a lovely picnic, or just to lie in for a day of rest. Then the nice over glow of a tree with its incredible branches tilted up to pray allowing just enough sun to seep through and giving a nice warmth that puts your soul at peace. Nature gives us peace of mind. As technology gets more and more proficient, greed starts to overwhelm us. Cars start proliferating and buildings start to overwhelm us. Slowly and slowly the grass starts to disappear, trees are almost obsolete. Neighborhoods with huge buildings surrounding the community make it hard for the overwhelming smell of gasoline to disperse, making it more convenient for people to stay shut in then go out. A pattern starts to occur; crime is starting to increase, and the behavior of the citizens becomes more hostile. Why is that? Is it due to the lack of green space and the closeness of concrete walls everywhere? Many researchers have taken it upon themselves to answer this question.

The prison system contains the world's most malicious and barbaric people. We throw them away behind bars. The main purpose of a prison is to keep law breakers away from society and to avoid any more criminal behavior. However, even with the great amount of security and control, the prison system is still in disarray. (...)

In conclusion, many studies have been done to show how important our environment effects the way, we go about our day. Building concrete walls around us without the balance of greenery only brings symptoms of aggression, hostility and etc..., negative behavior that increases our crime system data base. Planting trees and vegetation is what should be trying to do instead of building a suffocating environment filled with white walls slapping us in the face at every corner."

Azshea Lambert, South Lake High School, 12th grade